TILLER CABIN ABANDONED MINE REMEDIATION

ENVIRONMENTAL ASSESSMENT

EA OR-026-2000-31

BURNS DISTRICT OFFICE
HINES, OREGON

June 2000

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I. INTRODUCTION

This Environmental Assessment (EA) will assess the removal of Tiller Cabin, which is an existing structure in dilapidated condition, and associated structures and miscellaneous property.

A. Location

Tiller Cabin is located in Denio Basin at T. 41 S., R. 34 E., Section 11, SE¼SE¼ (Figure 1). It is located on Federal land managed by the Burns District, Bureau of Land Management (BLM), and is at 5,400 feet elevation. It is reached by driving 9 miles on a dirt access road north of Highway 140 and 3 miles west of Denio Junction.

B. Cabin Description and History

Tiller Cabin is a flat-topped plywood structure that is 36 feet long, 12 feet wide, and 8 feet high (Figure 2). See Appendix A for a more complete description of the cabin, associated structures, and miscellaneous property. The site has not been maintained and is no longer used for the purpose for which it was built. See Section III D for information on the unsafe condition of the cabin and associated structures.

William Tiller located six claims in Denio Basin in 1957, 1958, 1959, and 1965 and prospected for mercury. See Appendix B for more information on the mining history of the area. Tiller Cabin was constructed during 1963 to 1965, and used by the claimant and his family during the summer while working on the claims. William Tiller died several years ago and the claims lapsed in 1994. The cabin was occasionally used as a hunting cabin before it reached its current deteriorated condition. The former claimant's son, Raymond Tiller, recently signed a quitclaim deed that recognizes the property as belonging to the United States. Raymond Tiller stated that he is not interested in any of the miscellaneous property associated with the cabin.

C. Purpose and Need

The need for action is prompted by concern for proper stewardship of public land, public safety, and government liability.

D. Conformance with Land Use Plans

This EA is in conformance with the BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review and the Andrews Management Framework Plan.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action - Burning and Removal: Tiller Cabin and associated structures would be partly dismantled using hand tools, and roofing felt and asphalt mineral paper would be removed. Metal and other nonburnable materials would be loaded into a truck and taken to a landfill or scrap dealer or disposed of through other administrative processes. The wood would be stacked and burned. The access road would not be improved from its current condition.

Alternative A - Removal: Tiller Cabin and associated structures would be dismantled using hand tools. The materials and nearby miscellaneous items would be loaded into a truck and taken to a landfill, a scrap dealer, or disposed of through other administrative processes. The access road would not be improved from its current condition.

Alternative B - No Action: Tiller Cabin and associated structures and miscellaneous property would be left as-is to deteriorate naturally.

Alternative Considered but Not Developed - Upgrading and Maintaining the Cabin: It was determined that this alternative is too expensive and does not meet land management objectives.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. Cultural Resources

No historic value or significance has been associated with the cabin site. Because the structures are not 50 years old, they do not meet the criteria for eligibility as historic property.

The structures have no associated unique architectural features or designs.

B. Water Quality/Riparian Zones

Tiller Cabin is about 50 feet west of Denio Creek Water quality measurements in Denio Creek indicate that water temperatures measured near the cabin are higher than temperatures measured downstream from the cabin. Grasses are the dominant riparian vegetation near the cabin. There is an overstory canopy of willows and alders at the downstream site. Denio Creek is a water quality limited stream listed for high water temperature, sedimentation, and flow modification for the entire length of the creek from mouth to headwaters by the Oregon Department of Environmental Quality (DEQ) under the Clean Water Act Section 303(d). There is no measured effect of the cabin site on Denio Creek water quality.

Soil samples were collected in the vicinity of the cabin site to test for acidity. All tests proved negative.

C. Fish/Wildlife

Denio Creek contains a Federally listed threatened fish species, the Lahontan cutthroat trout. Mule deer and antelope are occasionally present in the area. Other mammals in the area include mountain cottontail rabbit, black-tailed jackrabbit, bushy-tailed woodrat, canyon mouse, deer mouse, long-eared myotis (bat), coyote, and bobcat. Chukars, sage grouse, and a variety of songbirds are also present in the area. Reptiles include sagebrush lizards, side-blotched lizards, western rattlesnakes and bullsnakes.

D. Safety/Hazardous or Solid Waste

In the past, the cabin has been used by hikers and hunters for shelter from sudden rainstorms and as a warm place to stay in cold weather. It has not been inhabited recently based on the presence of rodent droppings that would have been swept aside if someone had stayed there.

The cabin does not currently provide safe shelter. There is potential for disease from rodent use, the floorboards are old and could give way, some of the window panes are broken and do not keep out the wet weather, the site lacks adequate sanitation facilities, and the stovepipes for the living room stove and kitchen barrel stove are not up to fire code.

The nearby shed containing sediment samples has no roof and has not been inhabited. It is leaning precariously and has nails exposed, which pose a safety hazard to those who walk into the leaning structure.

Cabin materials are being tested for asbestos content. If asbestos is present, then the material would be removed by a licensed asbestos contractor and disposed of properly in accordance with Oregon DEQ regulations.

E. Wilderness/Visual Resources/Recreation

Tiller Cabin is within the Pueblo Mountains Wilderness Study Area (WSA) and adjacent to the WSA boundary road. The area is a WSA because it contains values of naturalness, solitude, primitive and unconfined recreation, and special features such as the tilted fault-block mountain range and drainage basins and meadows that contain the headwaters of perennial streams.

The site is within a Visual Resource Management Class I designation, which means that management activities may be seen but should not attract the attention of a casual observer.

The cabin site offers no recreation values due to health and safety concerns.

F. Air Quality

Air quality is excellent in this remote area.

G. Vegetation

Basin big sagebrush, rabbitbrush, cheatgrass, and Basin wildrye are dominant vegetation. Also present are lupine, tarweed, foxtail barley, and bluegrass. There are no trees in the area. There is a clump of willows about 75 feet southeast of the cabin along Denio Creek. Adjacent to the road, where vehicles have parked over the years, the ground is almost bare of vegetation.

H. Adjacent Landowners/Grazing Permittee

Approximately 2,000 feet north of Tiller Cabin is a 320-acre parcel of private land owned by Perry Still and Bill Mosier. Bill Mosier is the grazing permittee on the BLM land.

IV. ENVIRONMENTAL CONSEQUENCES

The following critical elements are either not present or not affected by the alternatives: Areas of Critical Environmental Concern, Cultural/Paleontology Resources, Prime or Unique Farmlands, Floodplains, American Indian Religious Concerns, Threatened or Endangered Plant Species, Wetlands or Riparian Zones, or Wild and Scenic Rivers.

A. Cultural Resources

Proposed Action and Alternative A: Removal of the cabin and associated structures and miscellaneous property would not impact cultural resource values.

Alternative B: There would be no change to existing conditions.

B. Water Quality/Riparian Zones

Proposed Action and Alternatives A and B: There would be no measurable change to existing conditions.

C. Fish/Wildlife

Proposed Action and Alternative A: The U.S. Fish and Wildlife Service was contacted to discuss removal of Tiller Cabin, and they agreed that dismantling with hand tools and removal would have "no effect" on the Lahontan cutthroat trout in Denio Creek. Minimal disturbance to other wildlife species may occur.

Alternative B: There would be no change to existing conditions.

D. Safety/Hazardous or Solid Waste

Proposed Action and Alternative A: The safety hazards created by the structures would be eliminated.

Alternative B: The presence of Tiller Cabin may encourage someone to move in. It would be difficult to evict someone if they move into the cabin in trespass.

The government could be held liable for safety problems such as the decaying floorboards, potential diseases, lack of proper sanitation, and fire danger.

E. Wilderness/Visual Resources/Recreation

Proposed Action and Alternative A: Removal of the cabin, associated structures, and nearby miscellaneous property would enhance wilderness values of naturalness, solitude, and primitive and unconfined recreation. Removal would improve visual resource values of the area within one-half mile of the cabin site.

Alternative B: The cabin, associated structures, and miscellaneous property are not substantially noticeable within the study area as a whole. Their presence is screened by topography until you are less than one-half mile from the cabin.

The presence and character of the cabin, associated structures, and miscellaneous property detract from natural visual resources values when you are less than one-half mile from the cabin.

F. Air Quality

Proposed Action: Burning the wood material at the site after removal of the roofing felt and asphalt mineral paper would slightly decrease air quality in the area for a few hours during burning.

Alternative A: Dismantling and removal of the structures would have no effect on air quality.

Alternative B: There would be no change to existing conditions.

G. Vegetation

Proposed Action and Alternative A: Removal of the cabin would result in a small increase in native vegetation. After removal of the cabin the site would need to be seeded to discourage weed invasion.

Alternative B: The presence of the cabin has not resulted in a weed invasion.

H. Adjacent Landowners/Grazing Permittee

Proposed Action: The adjacent landowners and grazing permittee would need to be notified prior to burning the wood. There is always the potential that the fire could escape and burn parts of the grazing allotment or private land. Burning would be conducted during times of low fire danger (late fall through spring).

Alternatives A and B: There would be no change to existing conditions.

V. CUMULATIVE IMPACTS

There would be no anticipated cumulative impacts associated with the Proposed Action and Alternatives A and B because it is the only cabin site along Denio Creek.

VI. CONSULTATION AND COORDINATION

A. Participating Staff

David Blackstun, Supervisory Natural Resources Specialist
Carolyn Chad, Range Management Specialist
Mary Emerick, Park Ranger
Terri Geisler, Geologist/Hazardous Materials Specialist
Rick Hall, Natural Resources Specialist
Rudy Hefter, Supervisory Natural Resources Specialist
Brian Lampman, Fisheries Biologist
Fred McDonald, Natural Resources Specialist
Matt Obradovich, Wildlife Biologist
Ellie Sippel, Hydrologist
Fred Taylor, Wildlife Biologist
Scott Thomas, Archaeologist

B. People Consulted

Bill Mosier, local landowner and grazing permittee
Raymond Tiller, former claimant's son, Burns, Oregon
Doug Young, U.S. Fish and Wildlife Service, Bend, Oregon

C. References

Howard Brooks, 1963, Quicksilver in Oregon: Oregon Department of Geology and Mineral Industries Bulletin 55, pages 202-203 (Double Link Prospect).

APPENDIX A – DESCRIPTION OF TILLER CABIN, ASSOCIATED STRUCTURES, AND MISCELLANEOUS PROPERTY

Tiller Cabin consists of two rooms, each with a door to the outside on the south side. The west room (the living room) was built in 1963 and the east room (the kitchen) was built in 1965. The two doors and the door frames were painted at one time but the paint is now mostly gone. The inside and outside walls are unpainted plywood. The outside walls are mostly covered with roofing felt and asphalt mineral paper.

In the living room is a barrel stove set on concrete pavers and a piece of asphalt mineral paper, a large piece of old carpet that is not secured to the plywood floor, an old sofa, a single-bed frame with two mattresses, a single bed frame with cardboard sheets sitting on it, and a wooden bench that may have been used as a single bed.

In the kitchen is a wooden table, a wooden bench, a kitchen stove set on cinder blocks with rolled carpet suspended from the ceiling near it that may have been extended between the stove and the door and used as a chimney, two cupboards, some folding chairs, and some pots and pans suspended from nails set on a board rack.

Behind the cabin, on the north side, is a metal sink and a nearby bucket without a bottom that acted as a sump, a large piece of deteriorated carpet (about 10 feet by 10 feet in size) on the ground, a can dumpsite, and mattress springs.

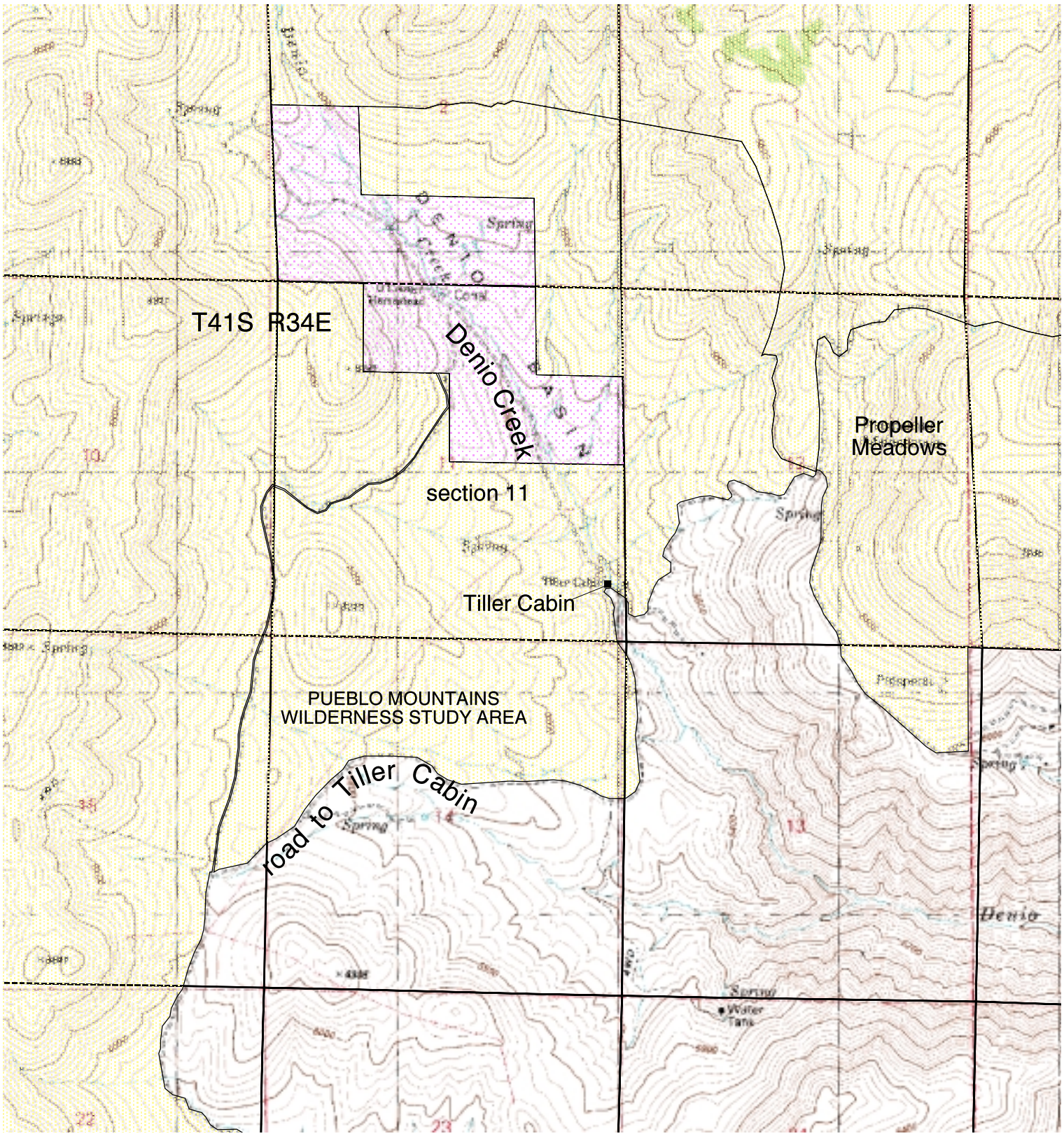
On the south side of the cabin is an outhouse that has been tipped over; the outhouse hole in the ground has been covered with dirt; a metal I beam, three bedsprings, and several miscellaneous boards and pieces of metal.

Across Denio Creek is a shed (Figure 3). It has no roof and the walls are leaning. Some shelves contain cardboard boxes of sediment. The cardboard boxes are mostly deteriorated and the sediment samples are eroding toward Denio Creek.

APPENDIX B – MINING HISTORY

According to *Quicksilver in Oregon* by Howard Brooks (1963), the area was originally under claim for many years by Jack Brady. He was looking for mercury ore in northwest-trending silicified "ribs" in basal Steens Basalt near its contact with pre-Tertiary rocks. In 1940, the claims in this area were relocated by J.B. Fine and B.T. Fiscal. Vestus Tiller and Myron Woodley acquired the claims during the 1950's. Exploratory work in the area prior to 1963 consisted of an adit 50 feet long, an adit 26 feet long, a shaft 35 feet deep, and several open cuts. There was no production. No structures were left from this earlier work.

According to Raymond Tiller, William Tiller primarily worked in a 60-foot deep shaft located across Denio Creek from Tiller Cabin and in a 40-foot long adit located approximately 200 feet downstream from the cabin and across Denio Creek. Work was primarily done in the 1950's and 1960's. There was no production because not enough ore was encountered. No mill nor retort was located in the area. The claimant backfilled the shaft years ago and there is now a 15-foot deep depression at the site due to settling. The adit entrance is completely collapsed.



Tiller Cabin
T41S R34E Section 11 SESE
Figure 1.

No warranty made by the BLM for use of the data for purposes not intended by the BLM.
Kelly Hazen Burns BLM GIS June 5, 2000

Pueblo Mountains Wilderness Study Area

BLM Lands

Private Lands

1:24000 2.64 inches on the map is 1 mile on the land

0.4 0 0.4 0.8 Miles

N

Figure 2 - Tiller Cabin

Figure 3 - Shed Containing Sediment Samples

USDI, Bureau of Land Management
Andrews Resource Area, Burns District
Hines, Oregon 97738

FINDING OF NO SIGNIFICANT IMPACT
FOR
TILLER CABIN ABANDONED MINED LAND REMEDIATION
Environmental Assessment EA OR-026-2000-31

The Burns District, Bureau of Land Management has analyzed Burning and Removal, Removal, and No Action Alternatives for the Tiller Cabin site. An alternative for upgrading and maintaining the cabin was considered but not analyzed. The analysis was prompted by concern for proper stewardship of public land, public safety, and government liability.

The Proposed Action is to partially dismantle Tiller Cabin and associated structures using hand tools. Roofing felt, asphalt mineral paper, metal, and other nonburnable materials would be loaded into a truck and taken to a landfill, a scrap dealer, or disposed of through other administrative processes. The wood would be stacked, and during low fire danger conditions it would be burned. The access road would not be improved from its current condition.

Determination

Based on the analysis of potential environmental impacts contained in the attached Environmental Assessment (EA) and all other available information, I have determined that the Proposed Action does not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts discussed in the EA have been disclosed. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Burns District, Andrews Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. Remediation would restore land impacted by past mining activity and eliminate public safety hazards.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplains, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern. There would be no adverse impacts from invasive, nonnative species.

4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk.

Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. The Proposed Action does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource-related plans, policies or programs. It does not preclude consideration or adoption of various alternatives in the ongoing Southeastern Oregon Resource Management Plan (SEORMP)/EIS, which will supersede the Andrews Management Framework Plan.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. No adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified.

10. This Proposed Action is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

_____ _____

Miles R. Brown Date
Andrews Resource Area Field Manager